

**DIRECT TESTIMONY OF
MARTIN K. PHALEN
ON BEHALF OF
SOUTH CAROLINA ELECTRIC & GAS COMPANY
DOCKET NO. 2010-5-G**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.**

2 A. My name is Martin K. Phalen, and my current business address is 220
3 Operation Way, Cayce, South Carolina. I am employed by South Carolina
4 Electric & Gas Company (“SCE&G” or the “Company”) as Vice President, Gas
5 Operations.

6 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS**
7 **BACKGROUND.**

8 A. Following my graduation from the College of Charleston in 1977, I was
9 employed with Cummins Engine Company in Charleston, South Carolina, where I
10 held various management and executive-level positions. In 1988, I joined SCE&G.
11 Since that time, I have held executive-level positions in Human Resources &
12 Administration, Operational Support, and, effective May 2003, Gas Operations. I
13 am a former member of the Board of Directors for the Southeastern Electric
14 Exchange, a current member of the Executive Council for the Southern Gas
15 Association, and a member of the Southern Gas Association’s distance learning
16 committee.

1 **Q. WHAT ARE YOUR DUTIES AS VICE PRESIDENT, GAS OPERATIONS?**

2 A. As Vice President, Gas Operations for SCE&G, my corporate responsibilities
3 include, among other things, oversight of the daily operations of SCE&G's natural
4 gas distribution system, including maintenance, construction, and gas sales.
5 Additionally, I am responsible for the overall reliability of the system, which
6 includes ensuring that the system is capable of providing safe and reliable service to
7 our customers.

8 **Q. WHAT IS THE PURPOSE OF THIS PURCHASED GAS ADJUSTMENT**
9 **(“PGA”) PROCEEDING?**

10 A. By Order No. 87-898, dated August 14, 1987, the Public Service
11 Commission of South Carolina (“Commission”) instituted an annual PGA review
12 of SCE&G's gas purchasing policies and practices. These PGA reviews are
13 conducted to determine the prudence of SCE&G's gas purchasing policies and
14 practices during the period under review and to determine if SCE&G properly
15 applied its tariffs in recovering its gas costs.

16 It is worth noting that in every PGA review, the Commission has found that
17 SCE&G's gas purchasing policies and practices were prudent and that the
18 Company properly adhered to the gas cost recovery provisions of its gas tariff and
19 applicable Commission directives and orders.

20 In this PGA proceeding, the Commission will hear from personnel who
21 implement SCE&G's gas purchasing practices and policies and who address tariff
22 issues on a day-to-day basis. Their testimony specifically relates to the period

1 under review, August 1, 2009 through July 31, 2010 (“Review Period”). J. Darrin
2 Kahl, Manager – Supply & Asset Management, explains SCE&G’s gas purchasing
3 practices, gas supply and interstate pipeline capacity and discusses financial
4 hedging. Alice A. Fox, Manager of Regulatory Accounting and Gas Rates,
5 discusses the PGA methodology for recovering the cost of gas implemented by the
6 Company pursuant to Commission Order Nos. 2006-679 and 2009-910.

7 **Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.**

8 A. The purpose of my testimony is to describe SCE&G’s natural gas
9 distribution system from an operating standpoint and discuss the primary facilities
10 that comprise the system, including the capacity of the system for serving
11 SCE&G’s customers. I will also discuss the construction projects that SCE&G is
12 engaged in which are designed to increase the capacity, reliability, and operational
13 flexibility of SCE&G’s system.

14 **Q. PLEASE DESCRIBE SCE&G’S NATURAL GAS DISTRIBUTION**
15 **SYSTEM FROM AN OPERATIONS STANDPOINT.**

16 A. SCE&G’s natural gas distribution system consists of approximately 16,000
17 miles of transmission and distribution mains and related service facilities. The
18 Company’s distribution facilities range in diameter from 5/8-inch polyethylene to
19 20-inch steel pipe and carry natural gas under pressures typically ranging from 25
20 pounds per square inch gauge (“psig”) to 1,100 psig in order to deliver safe,
21 reliable natural gas service to approximately 310,000 factories, businesses, and

1 homes in South Carolina. The Company also maintains 100 metered delivery
2 points through which gas is delivered to SCE&G's system and then distributed by
3 the Company to our customers. SCE&G currently provides natural gas service in
4 all or part of 35 of the 46 counties in South Carolina covering approximately
5 23,000 square miles.

6 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF SCE&G'S GAS**
7 **PURCHASING PRACTICES FOR THE REVIEW PERIOD.**

8 A. During the Review Period, SCE&G purchased all of its natural gas supply
9 directly from gas suppliers. While Company Witness Kahl will testify on this
10 subject in greater detail, SCE&G's management analyzes and considers the supply
11 and interstate capacity assets of its business on an on-going basis in order to
12 provide safe, reliable, and economical natural gas service in South Carolina. All
13 of the variables related to the growth in our state and the demand of SCE&G's
14 system must be balanced with corresponding supply and capacity needs. Finally, I
15 want to emphasize to the Commission that the Company procured reliable and
16 reasonably priced natural gas supplies during the Review Period.

17 **Q. WHAT LIQUEFIED NATURAL GAS ("LNG") FACILITIES DOES**
18 **SCE&G OPERATE?**

19 A. SCE&G owns and operates two LNG facilities. These facilities are located
20 at Bushy Park near North Charleston, and at Salley, located in western Orangeburg
21 County. The LNG facilities allow SCE&G to store natural gas in liquid form and

1 inject vaporized gas into SCE&G's system when needed. These assets are used
2 primarily to help meet peak loads on the system and serve as a backup supply of
3 gas in emergency situations.

4 **Q. WHAT ARE THE CAPACITIES OF THE LNG FACILITIES?**

5 A. The Bushy Park facility has the capability of converting natural gas into a
6 liquid, a process known as liquefaction. It can store up to 980,000 Mcf (thousand
7 cubic feet) of LNG. The Salley facility has the capability of storing up to 900,000
8 Mcf of trucked-in LNG. LNG must be transported to Salley via truck because
9 Salley does not possess the ability to liquefy natural gas.

10 **Q. HAS SCE&G MADE ANY IMPROVEMENTS TO ITS LNG FACILITIES**
11 **DURING THE REVIEW PERIOD?**

12 A. Yes. In Docket No. 2009-5-G, SCE&G informed the Commission that the
13 Company was in the process of upgrading the control systems at both LNG plants.
14 In June 2010, the Company completed the replacement of its LNG control systems
15 and the systems are functional today. In addition to improving SCE&G's control
16 capabilities, the new control systems also allow the Company to electronically
17 collect and trend plant operational data.

18 **Q. PLEASE EXPLAIN HOW SCE&G OPERATES ITS LNG SYSTEM.**

19 A. SCE&G primarily dispatches its LNG facilities to help meet peak loads on
20 its system during periods of high demand and to serve as a backup supply of gas in

1 emergency situations. At times, however, SCE&G must also dispatch the LNG
2 facilities to manage the Btu (British Thermal Unit) content of gas in storage. This
3 is primarily due to the higher Btu content gases being received from Southern
4 LNG's Elba Island import terminal near Savannah, Georgia. In response to the
5 receipt of higher Btu content gas, SCE&G has adopted a Btu content management
6 strategy that involves using its newly constructed nitrogen blending facilities,
7 completed in 2009, and turning the inventory over more frequently, which reduces
8 the effect of "weathering" whereby the Btu content of gas rises over time while in
9 storage.

10 **Q. PLEASE DISCUSS THE EFFECTS OF THE 2009-2010 WINTER ON THE**
11 **COMPANY'S SYSTEM.**

12 A. The 2009 – 2010 winter was extremely cold. In fact, the 2009-2010 winter
13 was 18% colder when compared to the 2008-2009 winter. Not only was the 2009-
14 2010 abnormally cold, the cold weather was sustained over long periods of time
15 causing demand to increase on SCE&G's system.

16 In spite of the extremely cold weather, SCE&G's natural gas system
17 functioned as designed and the Company met its natural gas service obligations to
18 its firm customers by providing a continuous, uninterrupted supply of natural gas
19 to our firm customers' homes and businesses. However, the cold weather did
20 require SCE&G to temporarily curtail natural gas service to certain interruptible
21 customers at various points in time during January and February 2010.

1 **Q. DID THE COLD TEMPERATURES IMPACT NATURAL GAS USAGE**
2 **DURING THE REVIEW PERIOD?**

3 A. Yes. The overall volume of natural gas consumed by SCE&G's customers
4 during the Review Period increased due in large part to the extremely cold winter
5 and lower gas prices. When comparing the 2009-2010 winter to the 2008-2009
6 winter, natural gas usage increased across all customer classes (firm and
7 interruptible) by approximately 17%. With regard to the Company's firm
8 customers, gas usage within the residential group increased 14%, gas usage within
9 the small general service/medium general service group increased 8%, and gas
10 usage within the large general service group increased 13%. While the bulk of
11 increased gas usage was primarily attributable to the cold weather experienced
12 during the Review Period and lower gas prices, SCE&G continued to experience
13 growth in the number of natural gas customers across all customer classes.

14 **Q. PLEASE DISCUSS THE GROWTH ON THE COMPANY'S SYSTEM**
15 **DURING THE REVIEW PERIOD.**

16 A. Despite the fact that the sluggish economy and high unemployment rates
17 continue to have a negative impact on residential and commercial construction,
18 SCE&G continues to experience growth on our gas system. During the Review
19 Period, the total number of customers grew by approximately 1.2%.

1 **Q. WHAT STEPS HAS SCE&G TAKEN TO IMPROVE AND EXPAND ITS**
2 **NATURAL GAS DISTRIBUTION SYSTEM DURING THE REVIEW**
3 **PERIOD?**

4 A. Over the years, SCE&G has consistently improved and expanded its system
5 by adding pipeline to reliably serve its new and existing customers and create
6 operating flexibility on its system. Much of the recent expansion of the system is
7 designed to accommodate population growth throughout South Carolina. For
8 example, during the Review Period, SCE&G improved its gas system in the
9 Myrtle Beach area by completing Phase 1 of a two phase construction project on
10 Highway 9 in Longs, South Carolina, which will serve the Sun Colony
11 development plus future developments on this route. In the Charleston area, the
12 system expansions include the Highway 17A project which will supply natural gas
13 from Highway 176 to Cypress Gardens Road through the Kearnes Crossroads area
14 of new developments in Berkeley County. In the South Aiken/New Ellenton
15 areas, Phase 1 of a three phase project to supply gas to this growth area is
16 completed and Phases 2 and 3 started in September 2010. In the Columbia area,
17 Phase 1 of a three phase project is complete along Langford Road from Highway
18 21 in Blythewood to the intersection of Bookman Road/Kelly Mill Road. This
19 project will supply gas to the growth areas in northeastern Richland County.
20 These improvements provide the required additional natural gas infrastructure to
21 ensure the safe and reliable delivery of natural gas to our customers in these
22 portions of the state.

1 **Q. PLEASE BRIEFLY DESCRIBE THE SAFETY PERFORMANCE OF**
2 **SCE&G CONCERNING ITS NATURAL GAS SYSTEM.**

3 A. SCE&G has an outstanding safety record due in large part to the
4 Company's safety conscience culture. SCE&G's highest priority is to safeguard
5 and protect those individuals who come into contact with the SCE&G system and
6 product, including employees, customers, and the public at-large. Moreover, the
7 Company employees who work on SCE&G's pipeline system and at the LNG
8 facilities take great pride in safety performance.

9 SCE&G's outstanding safety record is also attributable to the
10 comprehensive federal and state regulation of natural gas systems. At the federal
11 level, the United States Department of Transportation and the Pipeline and
12 Hazardous Materials Safety Administration, acting through the Office of Pipeline
13 Safety, have developed pipeline safety regulations over the years and are charged
14 with monitoring SCE&G's compliance with these regulations. At the state level,
15 the South Carolina Office of Regulatory Staff monitors the Company's
16 compliance with pipeline safety regulations. These pipeline safety regulations
17 include, among other things, provisions governing pipeline design, construction,
18 testing, operations, maintenance, and emergency response activities. There are
19 also specific requirements for training and qualifying personnel to work on natural
20 gas systems, as well as additional requirements for administering integrity

1 management programs for gas transmission pipelines. SCE&G operates its natural
2 gas system in full compliance with all laws and regulations.

3 **Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS**
4 **PROCEEDING?**

5 A. The primary commitments of SCE&G continue to be to operate our system
6 in a safe, reliable and efficient manner. Further, our employees are committed to
7 providing outstanding customer service and operational excellence. During the
8 Review Period, the Company prudently managed its business operations, which
9 included the purchase and recovery of its gas supplies and administration of the
10 PGA. Therefore, on behalf of SCE&G, I respectfully request the Commission find
11 that the Company has recovered its gas costs for the Review Period consistent
12 with its tariffs and Commission orders and that it has purchased its gas supplies
13 and administered the PGA in a prudent and reasonable manner.

14 **Q. DO YOU HAVE ANY OTHER REQUESTS OF THE COMMISSION?**

15 A. Yes. In years past, the Commission has scheduled SCE&G's annual PGA
16 hearing to take place in late June. With future review periods ending on July 31,
17 the Company respectfully requests that the Commission authorize Commission
18 Staff to schedule future PGA hearings for SCE&G in early November.

19 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

20 A. Yes.